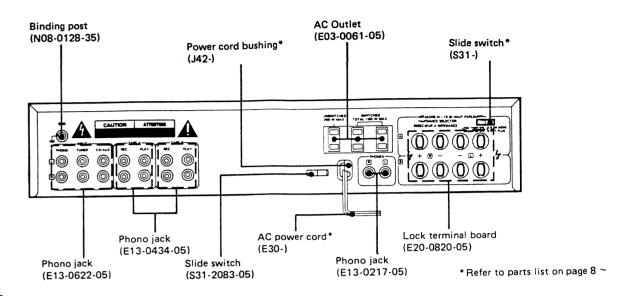


# EXTERNAL VIEW/ADJUSTMENT/REGLAGES/ABGLEICH



### ADJUSTMENT

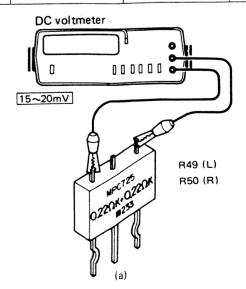
NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	IDLE CURRENT	_	Connect a DC voltmeter across R49 (R50)	VOLUME: 0	VR1 (L) VR2 (R)	15~20mV	(a)

### REGLAGES

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE L'AMPLICATEUR	POINTS L'ALIGNMENT	ALIGNER POUR	FIG.
1	REGLAGE DU COURANT DE POLARISATION	_	Connecter un voltmètre CC Sur R49(R50)	VOLUME : 0	VR1 (G) VR2 (D)	15~20mV	(a)

### **ABGLEICH**

NR.	GEGENSTAND	EINGANGS- EINSTELLUNG	AUSGANGS- EINSTELLUNG	VORSTÄRKER EINSTELLUNG	ABGLEICH- PUNKTE	ABGEICHEN FÜR	ABB.
1	LEERLAUFSTROM	_	Einen Gleichspan- nungsmesser über R49 (R50) anschließer	VOLUME : 0	VR1 (L) VR2 (R)	15~20mV	(a)



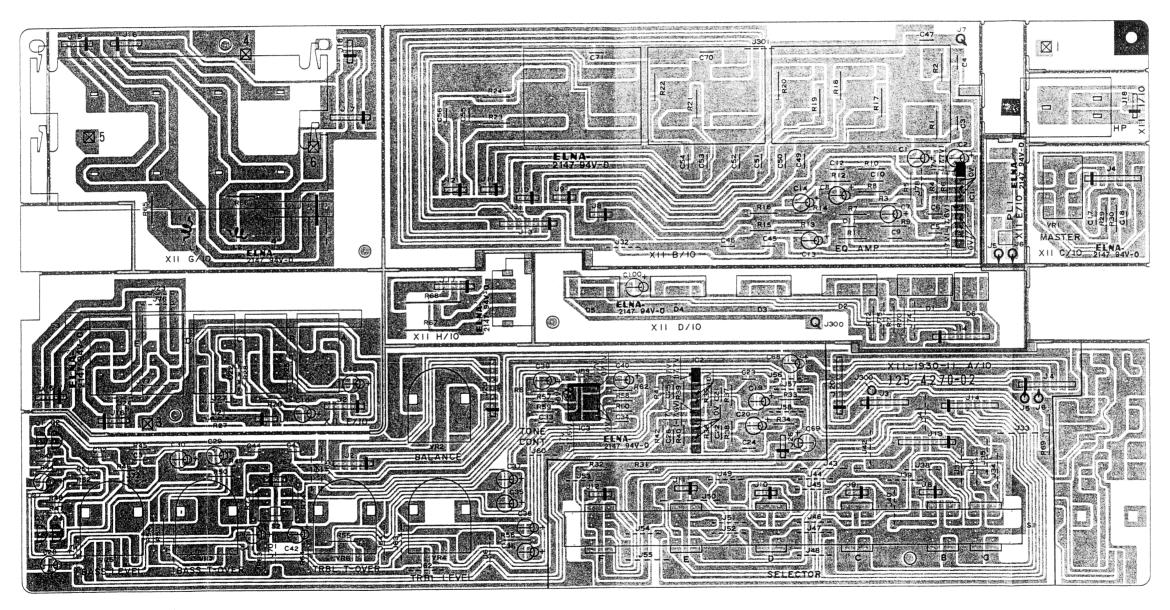
2



TONE AMP (X11-1930-11) Component side view

# PC BOARD

( ): KA-52

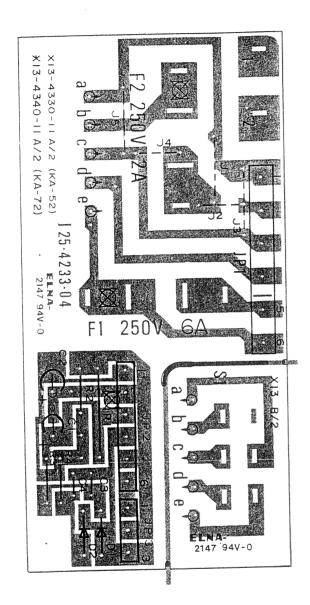


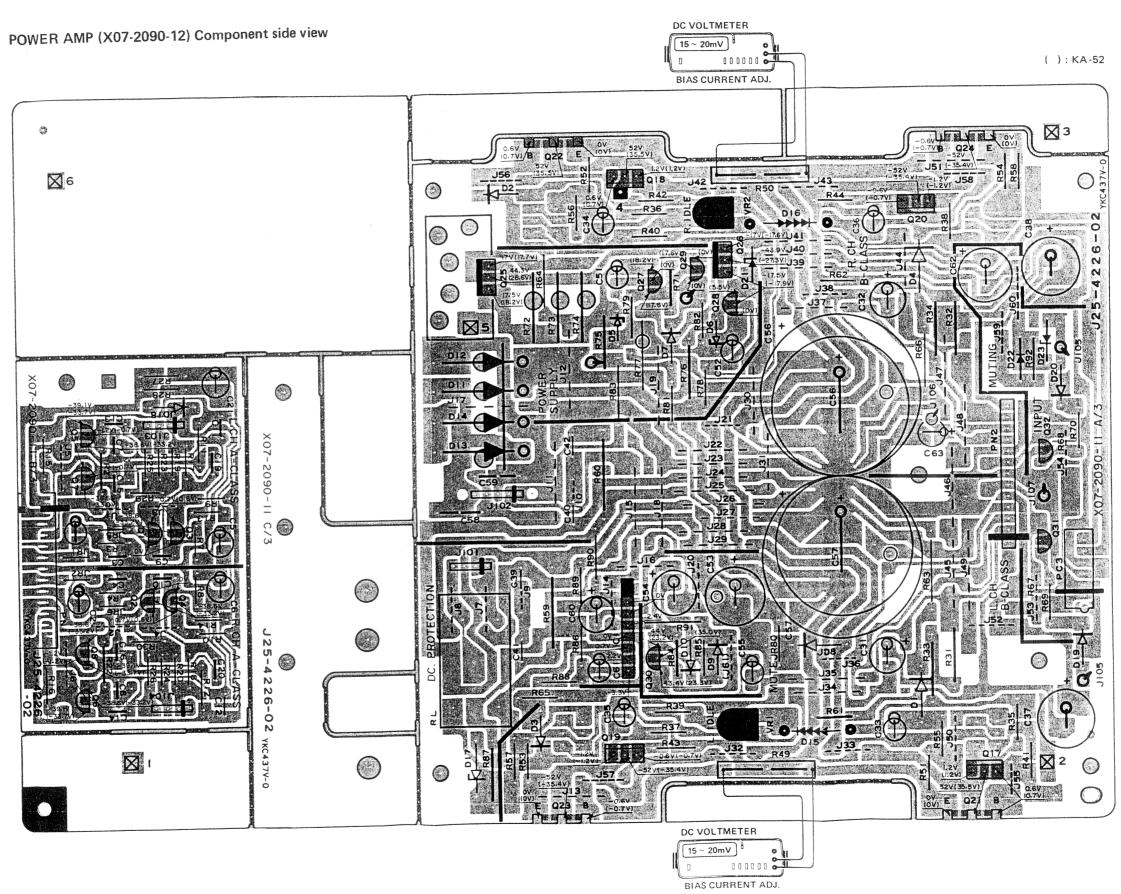
Refer to the schematic diagram for the values of resistors and capacitors. The PC board drawing is viewing from the side easy to check,

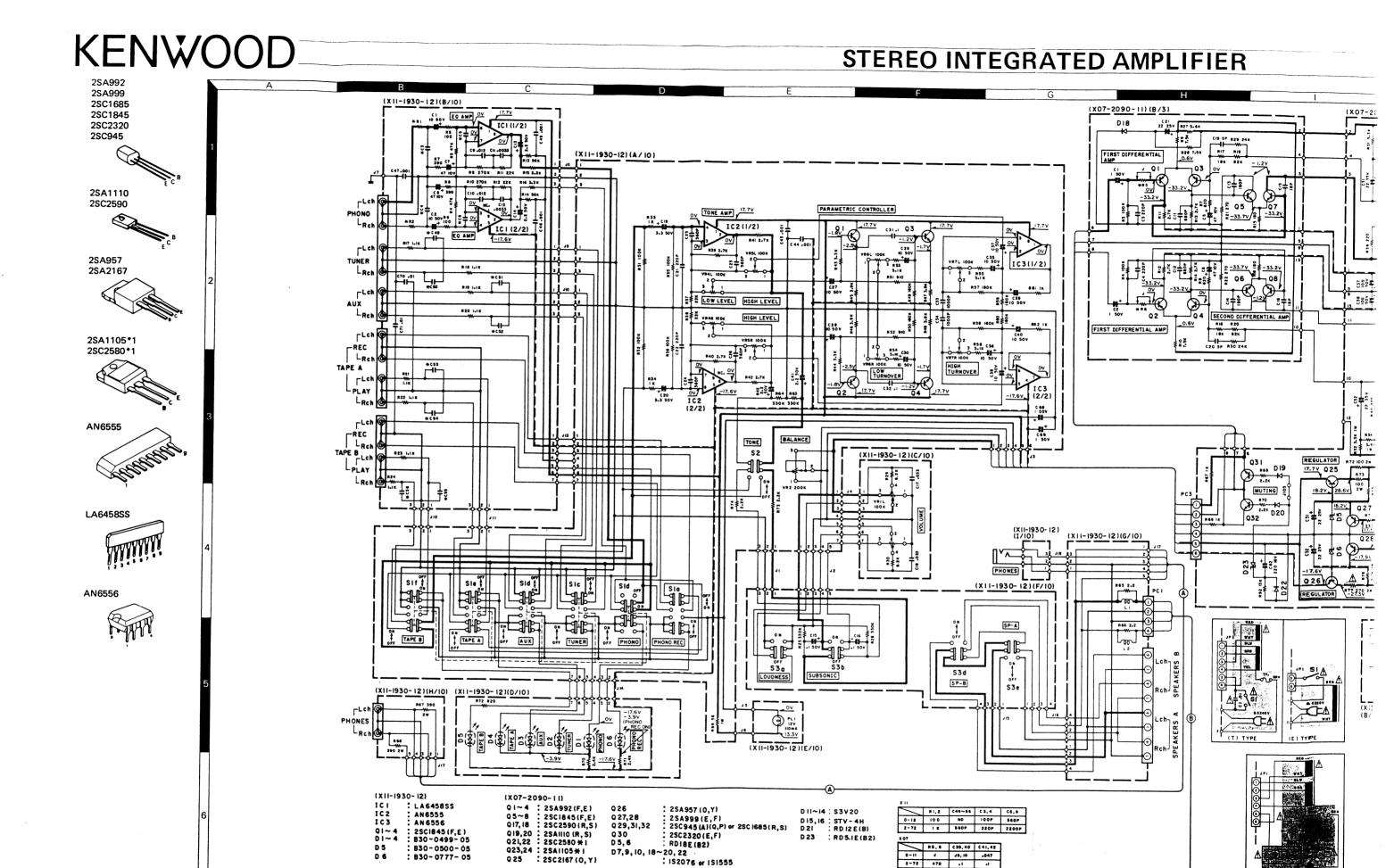
# KA-52/72 KA-52/72

# PC BOARD

POWER SUPPLY (X13-4340-11)
Component side view



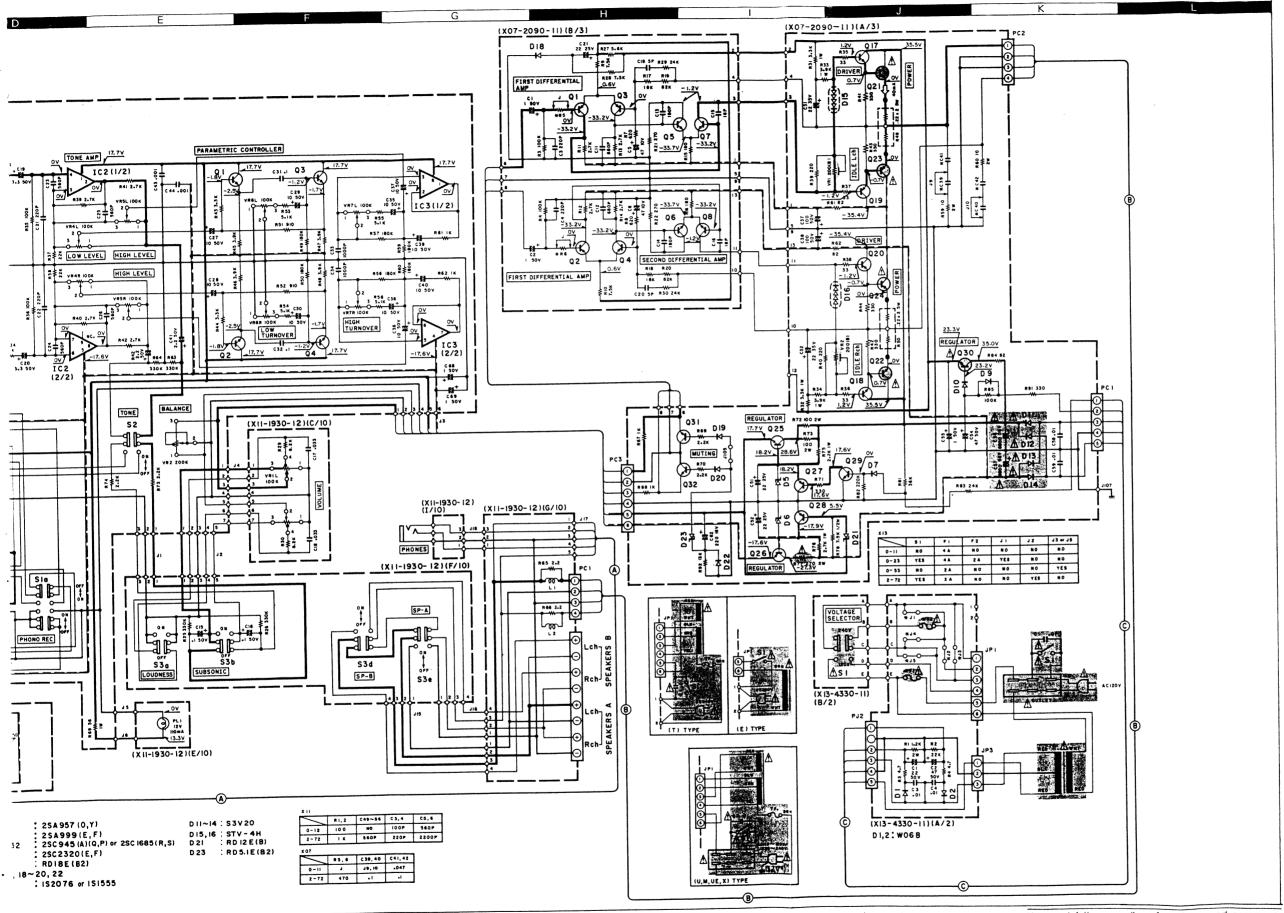




**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ▲Indicates safety critical components. To reduce the rick of electric shock, leakage-current or resistance

measurement shall be carried by insulated from the supportent the customer.

# STEREO INTEGRATED AMPLIFIER



CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). △Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance

measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

# KA-52/E



### **SPECIFICATIONS**

**Audio Section** 

Power Output

A.C. Outlet

50 watts\* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion.

marmorne distortion.	
Both Channels Driven at 8 ohm	
1 kHz	55 W + 55 W
Dynamic Power Output at	_
4 ohms	250 W
Total Harmonic Distortion	
TUNER input to SPEAKER out	put
(20 Hz to 20,000 Hz)	0.09% at rated power
	into 8 ohms
(20 Hz to 20,000 Hz)	0.04% at 1/2 rated power
	into 8 ohms
PHONO input to SPEAKER	
output (1 kHz)	0.04% at rated power with
	VOLUME -20 dB
Intermodulation Distortion	0.02% at rated power
(60 Hz:7 kHz = 4:1)	into 8 ohms
Damping Factor	20 (1 kHz into 8 ohms)
Power Bandwidth	10 Hz to 75 kHz
	at 0.2% T.H.D.
Frequency Response	10 Hz to 100 kHz,
	+ 0 dB, -3 dB
Input Sensitivity/Impedance	
Phono	2.5 mV/47 k onms
Tuner, Tape	150 mV/27 k ohms
Signal-to-Noise Ratio (IHF. A)	
Phono	73 dB for 2.5 mV input
	79 dB for 5.0 mV input
Tuner, Tape	101 dB for 150 mV input
Phono Maximum Input Level	150 mV (RMS),
	T.H.D. 0.05% at 1,000 Hz
Output Level/Impedance	
Tape REC (Pin)	150 mV/3.3 k ohms
Phono Frequency Response	RIAA standard curve ±0.5 dB
	(30 Hz to 20,000 Hz)
Tone Control	
Bass	±8 dB at 100 Hz
	(Turn over 100 Hz ~ 1 kHz)
Treble	± 8 dB at 10 kHz
	(Turn over 1 kHz ~ 10 kHz)
Loudness Control	+ 9 dB at 100 Hz
	(at -30 dB VOLUME Level)
General	
	60 Hz 120 V ( U.S.A. & Canada
Power requirements	models), 50 Hz 240 V (U.K. mod
	or 50/60 Hz 11 0 - 120 V/
	220 - 240 V, switchable
Power Consumption	185 W (III and CSA)
rower Consumption	350 W (European countries,
	U.K., Australia )
	170 M (Ott

 Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Ampilier in U.S.A.

170 W (Others) Switched 2, Unswitched 1

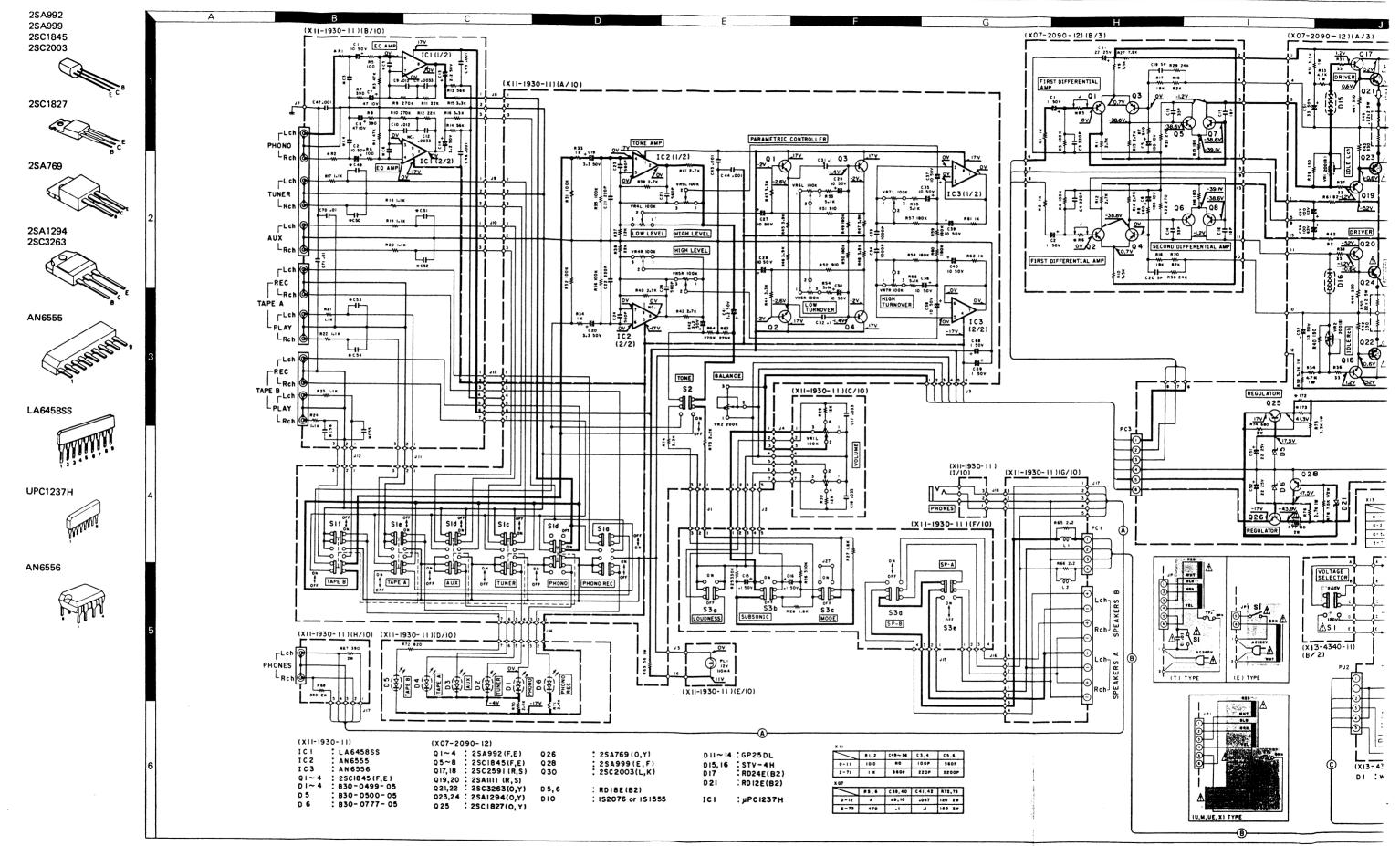
..6.5 kg (14.3 lb)

..W 420 mm (16-17/32") H 89 mm (3-1/2") D 279 mm (11")

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

KENWOOD

# STEREO INTEGRATED AMPLIFIER

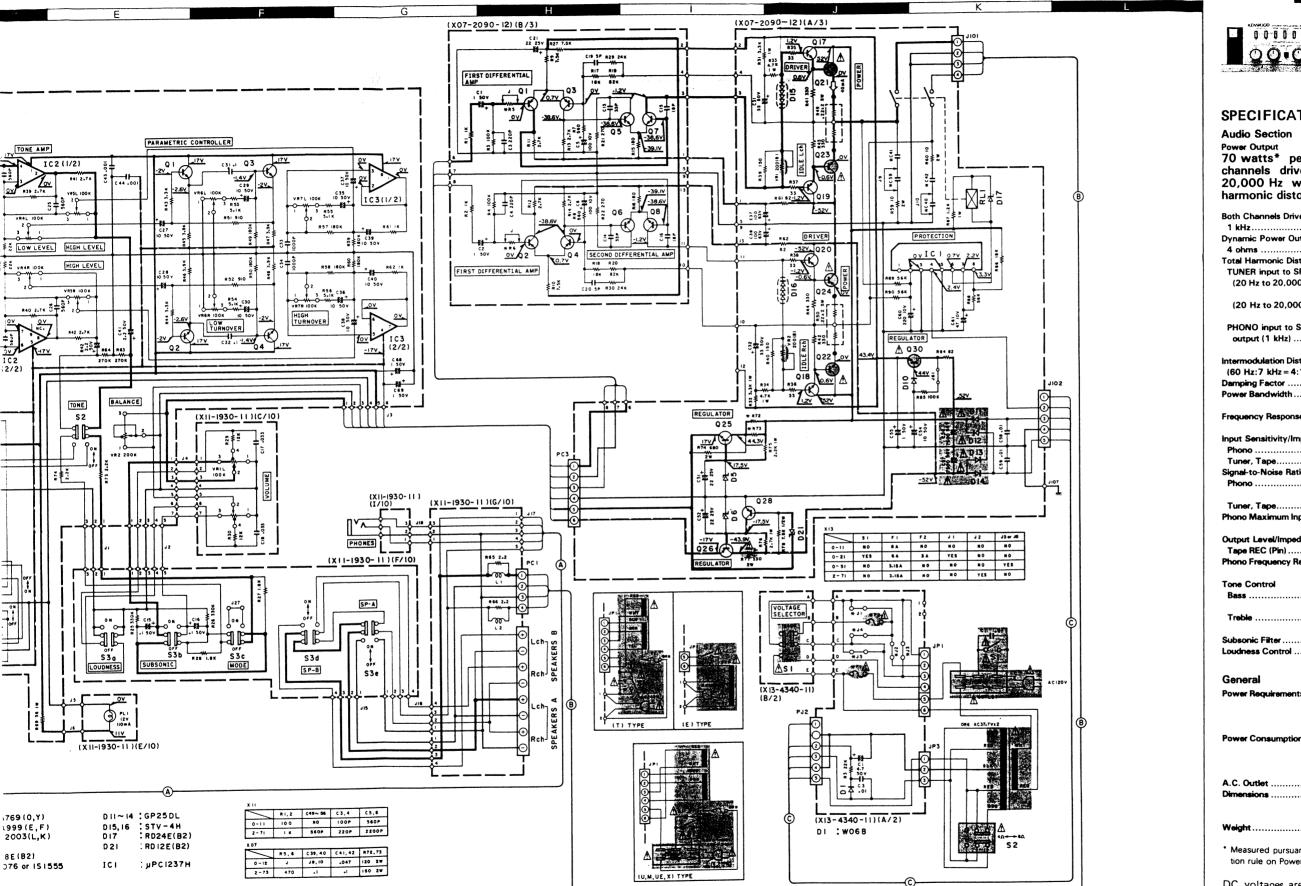


CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). △Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance

measurements shall be carried out (exposed pably insulated from the supply circuit) before returned to the customer.

# STEREO INTEGRATED AMPLIFIER





CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). △Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance

measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

### **SPECIFICATIONS** 70 watts\* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.05% total harmonic distortion. Both Channels Driven at 8 ohms, .75 W + 75 W Dynamic Power Output at Total Harmonic Distortion TUNER input to SPEAKER output (20 Hz to 20,000 Hz) ...0.05% at rated power into 8 ohms (20 Hz to 20,000 Hz) .0.03% at 1/2 rated power into 8 ohms PHONO input to SPEAKER .0.03% at rated power with VOLUME - 20 dB .0 02% at rated power (60 Hz:7 kHz = 4:1) into 8 ohms 20 (1 kHz into 8 ohms) .10 Hz to 80 kHz at 0.2% T.H.D. .10 Hz to 100 kHz. +0 dB -3 dB.2.5 mV/47 k ohms .150 mV/25 k ohms Signal-to-Noise Ratio (IHF. A) .73 dB for 2.5 mV input 79 dB for 5.0 mV input .101 dB for 150 mV input ...150 mV (RMS), Phono Maximum Input Level .. T.H.D. 0.05% at 1,000 Hz Output Level/Impedance .150 mV/3.3 k ohms .RIAA standard curve ±0.3 dB Phono Frequency Response. (20 Hz to 20,000 Hz) . ±8 dB at 100 Hz (Turn over 100 Hz ~ 1 kHz) . ±8 dB at 10 kHz (Turn over 1 kHz~10 kHz) ..60 Hz, 6 dB/oct. .. + 8 dB at 100 Hz (at -30 dB VOLUME Level)

 Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

.60 Hz 120 V (U.S.A. & Canada models), 50 Hz 240 V (U.K. model) or 50/60 Hz 110 - 120 V/ 220 - 240 V, switchable ..2.7 A (UL and CSA)

460 W (European countries, U.K., Australia) 230 W (Others) "Switched 2. Unswitched 1

.W 420 mm (16-17/32\*) H 89 mm (3-1/2\*)

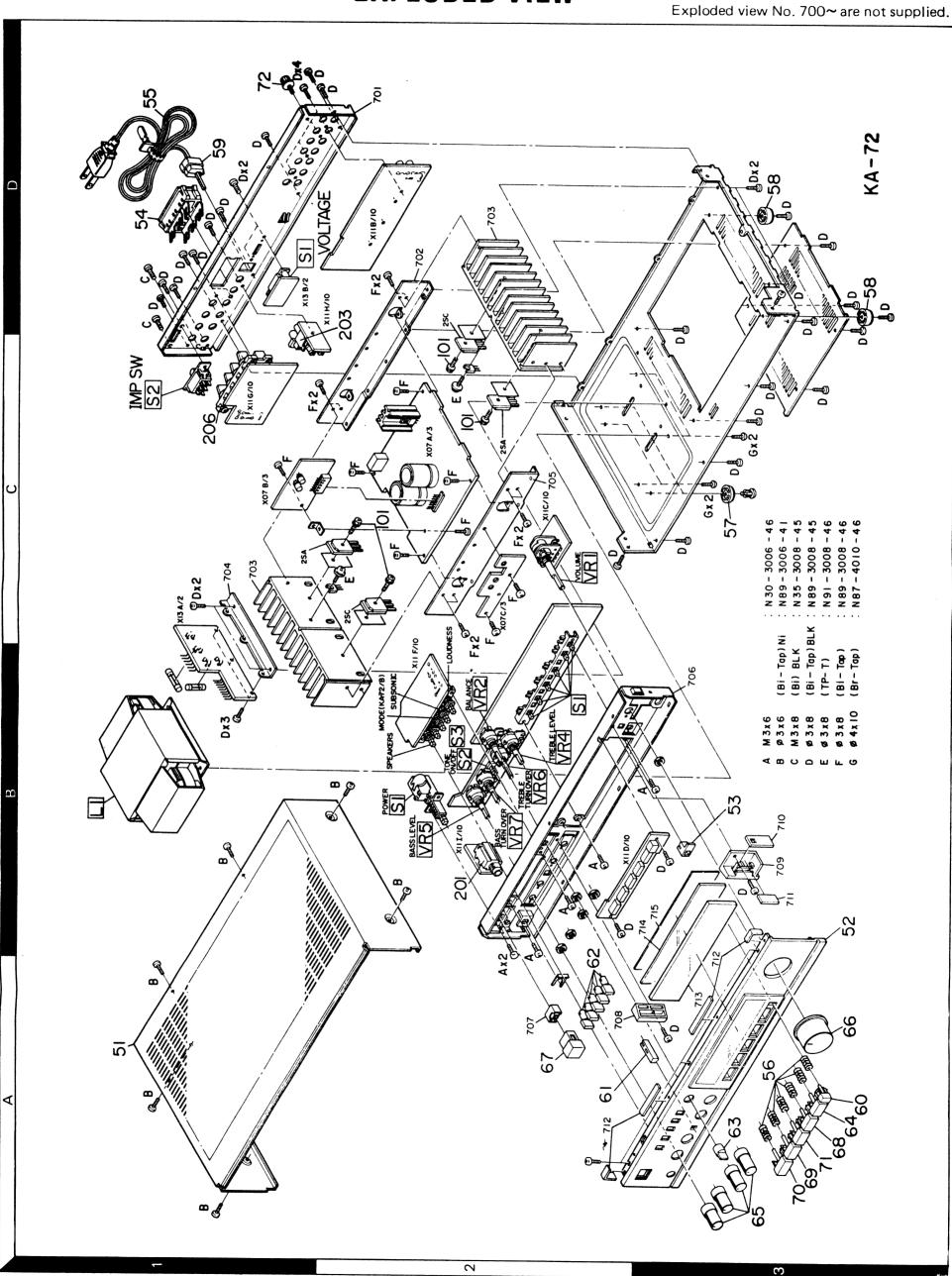
D 279 mm (11")

..6.5 kg (14.3 lb)

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.



# **EXPLODED VIEW**



\*New Parts
Parts without Parts No. are not supplied
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref.	No.	Address		Parts	No.	Description	Desti-	Re-
参 照	番号	位置	Parts 新		番 号	部品名/規格		mark 備考
			1			KA-52	<u> </u>	L
51 51 51 52 52		1A 1A 1A 3B 3B	*	A01-0648 A01-0648 A01-0649 A20-3667 A20-3667	-02 -02 -03	METALLIC CABINET METALLIC CABINET METALLIC CABINET PANEL ASSY PANEL ASSY	KPUM UEX TE KPUM UEXE	
52		3B	*	A20-3668	-03	PANEL ASSY	Т	
				846-0092 846-0093 846-0094 846-0095 846-0096	-03 -03 -03	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	K P U <u>UE</u> U <u>UE</u> X	
- - -				846-0097 846-0098 850-5018 850-5018 850-5019	-03 -00 -00	WARRANTY CARD WARRANTY CARD INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (F)	T E KPUM UE PMXE	
-				B50-5020 B50-5021 B50-5027 B59-0092	-00 -00	INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (G,D,I,SW) INSTRUCTION MANUAL (SP,E) SERVICE DIRECTORY	T E M U <u>UE</u>	
CI A			T.			DERAMIC ALL DIUF AC250V	UM <u>UE</u> X KP	
53		3B		D22-0050	-04	SHAFT COUPLING		
54 54 55 55 55		1D 1D 1Du 1Du 1D		E03-0061 E03-0061 E30-0181 E30-0459 E30-0587	-050 -050 -0518	AC SUTLET AC SUTLET AC POWER CORD AC POWER CORD AC POWER CORD	KPUM UEX K E T	
		10.	K. A.	ESUPERA ESUPERA ESUPERA		AC POWERS CORD ACQ POWERS AND TO ACQ POWERS AND TO	X P UMUE	3.7.2
56		3A		G01-1438	-04	COMPRESSION SPRING	,	
1 1 1 1			* *	H01-4971 H01-4972 H01-4972 H10-1706 H25-0078	-04 -04 02	ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE PROTECTION BAG	T KPUM <u>UE</u> XE	
57 58 <b>59</b> 59		3C 3D		J02-0109 J02-0129 (142-0093 (142-0093)	-05 -05	FOOT FOOT POWER CORD BUSHING POWER CORD BUSHING POWER CORD BUSHING POWER CORD BUSHING	KPUM UETE	
60 61 62 63 64		3A 2A 2A 3B 3A		K27-1060 K27-1061 K27-1112 K27-1230 K29-1351	-04 -04 -04	KNOB (BUTTON) PHONO REC KNOB (BUTTON) PUSH KNOB (BUTTON) SPEAKERS KNOB BALANCE KNOB ASSY PHONO		
65 66 67		3A 3A 2A		K29-1352- K29-1354 K29-1446-	-04	KNØB TØNE KNØB VØLUME KNØB ASSY PØWER		

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa

\*New Parts
Parts without Parts No. are not supplied
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

	Ref.	No.	Addres	s New	F	arts	No		Description	Desti-	Re-
	那零	番号	位置	Parts 新	部	品	番	号	部品名/規格	nation	marks 備考
	68 69 70 71		3A 3A 3A 3A		K29-1 K29-1 K29-1 K29-1	451 452	-04 -04		KNOB ASSY TUNER KNOB ASSY TAPE A KNOB ASSY TAPE B KNOB ASSY AUX		
Δ Δ Δ	LI LI LI LI		18 18 18 18	**	770.3	402- 406-	-05 -05		POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	KP E UM <u>UE</u> X T	
	72		1 D		N08-0	128-	-35		BINDING POST		
◭	SI	and attendance	5B	120	540-1	066-	-05	TO THE	PUSH SWITCH (POWER TYPE)		300
	P+ 4				1004 0		-		KA-52B		
	51 52 52 52		1A 3B 3B 3B	* *	A01-0 A20-3 A20-3 A20-3	797- 797-	-03 -03		METALLIC CABINET PANEL ASSY PANEL ASSY PANEL ASSY	KPUM UEXE T	
	- - - -				B46-0 B46-0 B46-0 B46-0 B46-0	093- 094- 095-	-03 -03 -03		WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	K P U <u>UE</u> U <u>UE</u> X	
	- - -				B46-0 B46-0 B50-5 B50-5 B50-5	098- 018- 018-	-03 -00		WARRANTY CARD WARRANTY CARD INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (F)	T E KPUM <u>UE</u> PMXE	
	-			3	850-50 850-50 850-50 859-00	021- 027-	-00 -00		INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (G,D,I,SW) INSTRUCTION MANUAL (SP,E) SERVICE DIRECTORY	T E M U <u>UE</u>	
Δ	CI			**	C91-0				CERAMIC ULOTUR AC250V: CERAMIC D. DIUF P	UM <u>DE</u> X.	
	53		3B		D22-00	350-	04		SHAFT COUPLING		
	54 54 55 55 55 55		1D 10 1D 1D 1D 1D		E03-0 E03-0 E30-0 E30-0 E30-0	能	05) 05'	37	AC OUTLE AC OUTLED AC POWER CORD AC POWER CORD AC POWER CORD	KPUM* UEX K/** E T	
<b>∆</b> <b>∆</b>	55 55 55		1D 1D 1D		E30-00 E30-00 E30-00	780-	05	10 m	AC POWER CORD	X P UM <u>UE</u>	
	56		3A		G01-14	138-	04		COMPRESSION SPRING		
	- - -			* *	H01-50 H01-50 H01-50 H10-17 H25-00	127- 128- 106-	04 04 02		ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE PROTECTION BAG	KPUM U <u>E</u> XE T	
	57 58	and the second second second	3C 3D		J02-01	129-	05	1	F00T		
Δ	<b>59</b> 59 59		1D 1D 1D		J42-00 J42-00 J42-00	)83 <u>-</u>	05		POWER CORD BUSHING POWER CORD BUSHING POWER CORD BUSHING	KPUM UETE X	

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa

T: England U: PX(Far East, Hawaii)

X: Australia M: Other Areas

\* New Parts

Parts without Parts No. are not supplied
Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

(		1	o. werden n							<del> </del>		
	Ref. N		Address	Parts	Parts				cription	4.6-	nation	Re- marks
	参照者	F 75	位置	新		番号	一 超	品	名 / 規 	<b>船</b> 	仕 向	備考
	60 61 62 63 64		3A 2A 2A 3B 3A	*	K27-1164- K27-1153- K27-0965- K29-1518- K29-1511-	-04 -04 -04	KNØB (BUTTØ KNØB (BUTTØ KNØB (BUTTØ KNØB KNØB ASSY	N)	PUSH			
	65 66 67 68 69		3A 3A 2A 3A 3A	* * *	K29-1516- K29-1517- K29-1446- K29-1512- K29-1514-	-04 -04 -04	KNOB KNOB KNOB ASSY KNOB ASSY KNOB ASSY		TØNE VØLUME PØWER TUNER TAPE A			
	70 71		3A 3A	*	K29-1515- K29-1513-		KNØB ASSY KNØB ASSY		TAPE B AUX			
Δ Δ Δ			1B 1B 1B 1B			05:00	POWER TRANS POWER TRANS POWER TRANS POWER TRANS	FOR	RMER A		TEXT CIMUEX*	<b>M</b>
	72		1 D		N08-0128	-35	BINDING POS	ST				
Δ	SIST		28/19				PUSH SWITCH			ENA	79.77	34°S
	C1 ,2				CEO4FW1H0		MP (X07-2090- ELECTR®		UF	50WV		
	C3 ,4 C5 ,6 C11 ,1 C13 ,1	2			CC45FSL1F CE04FW1A4 CK45FB1Hc CC45FSL1F	H221J 470M 681K	CERAMIC ELECTRO CERAMIC CERAMIC	4	220PF 17UF 580PF .80PF	J 10WV K J		
	C15 +1 C19 +2 C21 C31 +3 C37 +3	0 2		Annual Antonio de Composito de de Antonio de	CC45FSL1F CC45FSL1F CE04FW1E2 CE04FW1V2 CE04FW1H	H050C 220M 220M	CERAMIC CERAMIC ELECTRO ELECTRO ELECTRO		18PF 5. OPF 22UF 22UF 100UF	J C 25WV 35WV 50WV		
	C39 -4 C41 ,4 C41 ,4 C51 ,5 C54	2			CF92FV1H; CF92FV1H4 CF92FV1H4 CE04FW1E; CE04FW1H4	473J 473J 220M	MF MF ELECTRO ELECTRO	( ( (	). 10UF ). 047UF ). 047UF 22UF 17UF	J J 25WV 50WV	TE KPUM UEX	
	C55	week term		and the	CEO4FW1H	D10M	ELECTRO FREGURO	rasian's	UF	50WV	t with the control of the second	LASSET : Symmetry
Δ	C58 .5 C62	0		3 46	CK45E2H10 CEO4FW1C2	03P	CERAMIC ELECTRO	C	0.01UF 220UF	P		
	101		20		N09-0333	-05	TAPPING SCR	REW				
	R15 ,1 R21 ,2 R31 ,3 R33 ,3 R35	2		*	RD14AB2E RD14GB2E2 RS14GB3A RS14GB3A RD14GB2E	271J 332J 392J	FL-PR00F RD FL-PR00F RD FL-PR00F RS FL-PR00F RS FL-PR00F RD	3 3 3	180 270 3. 3K 3. 9K 33	J 2E J 2E J 3A J 3A J 2E		
	R36 R37 R38 R39 +4 R41	.0		* * * * *	RD14AB2E3 RD14GB2E3 RD14AB2E3 RD14AB2E3 RD14AB2E3	330J 330J 221J	FL-PR00F RD FL-PR00F RD FL-PR00F RD FL-PR00F RD FL-PR00F RD	) 3 ) 3	33 33 33 220 330	J 2E J 2E J 2E J 2E J 2E		
	R42 R43 ,4 R49 ,5			*	RD14GB2E3 RD14AB2E3 R90-0187	331J	FL-PR00F RD FL-PR00F RD MULTI-C0MP	) 3	330 330 3. 22X2	J 2E J 2E K 3H		

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa

UE: AAFES(Europe)

X: Australia M: Other Areas

\* New Parts

Parts without Parts No. are not supplied
Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

	Ref. No.	Address No		Description	Desti- Re-
	参照番号		rts 新品番号	部品名/規格	nation marks 仕 向備考
	R59 ,60 R61 ,62 R72 ,73 R75 R76	*	RS14GB3D100J RD14AB2EB2DJ RS14GB3D101J RS14GB3A222J RS14GB3A272J	FL-PR00F RS 10 J 3D FL-PR00F RD 82 J 2E FL-PR00F RS 100 J 3D FL-PR00F RS 2.2K J 3A FL-PR00F RS 2.7K J 3A	
▲	R77 R78 R84 VR1 +2	**	RD14GB2H752J	FC-PROOF RS 270 J. JD. S FL-PROOF RD 7.5K J 2H FL-PROOF RD 82 J 2E TRIMMING POT. 200(B) BIAS	5.5.5 See 37.5
	D5 ,6 D7 D7 D9 ,10	*	RD18E(B2) 1S1555 1S2076 1S1555 1S2076	ZENER DIØDE DIØDE DIØDE DIØDE DIØDE	
Δ	D11 -14			M()))> 3.44	2/33/2010 03/37
	D15 ,16 D18 -20 D18 -20 D21		STV-4H 151555 152076 RD12E(B2)	VARISTØR DIØDE DIØDE ZENER DIØDE	
	D22 D22 D23 Q1 -4 Q5 -8		151555 152076 RD5. 1E(B2) 25A992(F+E) 25C1845(F+E)	DIØDE DIØDE ZENER DIØDE TRANSISTØR (1ST AMP) TRANSISTØR (2ND AMP)	
<b>A</b>	017 ·18 019 ·20 021 ·22		2SC2590(R,S) 2SA1110(R,S) 2SC2580*1	TRANSISTOR (DRIVER) TRANSISTOR (DRIVER) TRANSISTOR (POWER)	
◭	Q23 .24 Q25	*	25A1105*1 2SC2167(0,Y)	TRANSISTOR (POWER)	
♠	026 027 ,28 029 029 <b>030</b>	*	2SA957(N,Y) 2SA999(E,F) 2SC1685(R,S) 2SC945(A)(Q,F)	TRANSISTOR (REGULATOR) TRANSISTOR(POWER SUPPLY CONT.) TRANSISTOR (MUTE DRIVE) TRANSISTOR (MUTE DRIVE) TRANSISTOR (REGULATOR)	
4.13	031 ,32 031 ,32		2SC1685(R.S) 2SC745(A)(Q.P)	TRANSISTOR (MUTING) TRANSISTOR (MUTING)	
			TONE AM	P (X11-1930-12)	
	D1 -4 D5 D6 PL1		B30-0499-05 B30-0500-05 B30-0777-05 B30-0372-05	LED (SELECTOR) LED (TAPE B) LED (PHONO REC) LAMP (POWER) 12V O.11A	
	C1 ,2 C3 ,4 C3 ,4 C3 ,4 C5 ,6		CEO4FW1H100M CC45FSL1H101J CC45FSL1H101J CC45FSL1H221J CK45FB1H222K	ELECTRN 10UF 50WV CERAMIC 100PF J CERAMIC 100PF J CERAMIC 220PF J CERAMIC 2200PF K	KPUM UEX TE TE
	C5 ,6 C5 ,6 C7 ,8 C9 ,10 C11 ,12		CK45FB1H561K CK45FB1H561K CE04FW1A470M CF92FV1H123J CF92FV1H332J	CERAMIC 560PF K CERAMIC 560PF K ELECTRO 47UF 10WV MF 0.012UF J MF 3300PF J	KPUM <u>UE</u> X
	C13 ,14 C15 ,16 C17 ,18		CE04FW1H2R2M CE04FW1H0R1M CF92FV1H333J	ELECTRO 2.2UF 50WV ELECTRO 0.1UF 50WV MF 0.033UF J	

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa



\*New Parts
Parts without Parts No. are not supplied
Les articles non mentionnes dans le Parts No. ne sont pas fournis
Teile ohne Parts No. werden nicht geliefert

R	Ref. No.	Address	1 1	Parts No.	Description		Re-
1	参照者号	位 置	Parts 新	部品番号	部品名/規格	nation 仕 向	marks 備考
C2 C2 C2	9 ,20 21 ,22 23 -26 27 -30 31 ,32			CE04FW1H3R3M CC45FSL1H221J CK45FB1H561K CE04FW1H100M CF92FV1H104J	ELECTR® 3.3UF 50WV CERAMIC 220PF J CERAMIC 560PF K ELECTR® 10UF 50WV MF 0.10UF J		
C3 C4 C4	33 ,34 35 -40 31 ,42 3 -47 49 -56			CK45FB1H102K CE04FW1H100M CE04FW1H2R2M CK45FF1H103Z CK45FB1H561K	CERAMIC D. 001UF K ELECTRO 10UF 50WV ELECTRO 2. 2UF 50WV CERAMIC D. 01UF Z CERAMIC 560PF K	TE	
	68 ,69 20 ,71			CEO4FW1HO10M CK45FF1H103Z	ELECTRO 1UF 50WV CERAMIC 0.01UF Z		
20 20 20 -	3	2B 1C 1C		E11-0135-05 E13-0217-05 E20-0820-05 E13-0434-05 E13-0622-05	PHONE JACK (HEADPHONE) PHONO JACK (2P) LOCK TERMINAL BOARD (SPEAKERS) PHONO JACK (4P) PHONO JACK (6P)		
L.1	,2			L39-0085-05	PHASE-COMPENSATION COIL		
	₹1			RD14GB2E2R2J RS14GB3D391J RS14GB3A560J RO6-5087-05 RO1-5041-05	FL-PROOF RD 2.2 J 2E FL-PROOF RS 390 J 3D FL-PROOF RS 56 J 3A POTENTIOMETER 100K(B)VOLUME POTENTIOMETER 200K(W)BALANCE		
	R4 ,5 R6 ,7		* *	R06-5116-05 R06-5117-05	POTENTIOMETER 100K TONE POTENTIOMETER 100K TURNOVER		
\$1 \$2 \$3	2		*:	\$42-6016-05 \$40-2323-05 \$42-4035-05	MULTIPLE PUSH SWITCH(SELECTOR) PUSH SWITCH (TONE) PUSH SW. (MODE, SP, LOUD, SUBSONIC		
	02 0 <b>3</b>			LA645855 AN6555 AN6556 25C1845(F+E)	IC (EQ AMP) IC (TONE AMP) IC (TONE AMP) TRANSISTOR (CONTROLLER)		
			*	POWER SUF	PLY (X13-4330-11)	J	L
01 01 01 02 02	1 1 •2 2			CE04W1H22OM CE04W1H22OM CE04W1H47OM CE04W1H47OM CE04W1H47OM	ELECTR®         22UF         50WV           ELECTR®         22UF         50WV           ELECTR®         47UF         50WV           ELECTR®         47UF         50WV           ELECTR®         47UF         50WV	KPUM UEXT E KPUM UEXT	
c:	3,4			CK45F1H103Z	CERAMIC 0.01UF Z		
	1 L			F05-4022-05 F06-2021-05 F06-4024-05 F05-2023-05 F06-2021-05-5-3	FUSE FUSE (SEMKO) FUSE (UL) FUSE FUSE (SEMKO)	UMUEX E KP UMUEX T	
-				J13-0041-05 J13-0055-05	FUSE CLIP	UMUEX KPTE	
R:				RS14GB3D122J RD14GB2E4R7J	FL-PR00F RS 1.2K J 3D FL-PR00F RD 4.7 J 2E		
A S		763034766		\$31,420,000,005,000,000	SINDERSWITTGHT POWER VOLTAGE)	UM <u>UE</u> X₩	1040
D	1 ,2			MD6B	DIODE	1	1

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa



\*New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis
Teile ohne Parts No. werden nicht geliefert.

F	Ref. No.	Address	1	Parts	No.	Description	Desti-	Re-
؛ ا	参照番号	位 置	Parts 新	品幣品	番 号	部品名/規格		mark: 備考
			.1		,	KA-72	1	L
51 51 51 52 52	1 l 2	1A 1A 1A 3B 3B	*	A01-0648- A01-0648- A01-0649- A20-3662- A20-3662-	-02 -02 -03	METALLIC CABINET METALLIC CABINET METALLIC CABINET PANEL ASSY PANEL ASSY	KPUM UEX TE KPUM UEXE	
52	2	3B	*	A20-3663-	-03	PANEL ASSY	Т	
			7.487	B46-0072- B46-0073- B46-0074- B46-0075- B46-0076-	-03 -03 -03	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	K P U <u>UE</u> U <u>UE</u> X	
-			* * *	846-0097- 846-0098- 850-5018- 850-5018- 850-5019-	-03 -00 -00	WARRANTY CARD WARRANTY CARD INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (F)	T E KPUM <u>UE</u> PMXE	
- - -			* *	B50-5020- B50-5021- B50-5027- B59-0092-	-00 -00	INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (G,D,I,SW) INSTRUCTION MANUAL (SP,E) SERVICE DIRECTORY	T E M U <u>UE</u>	
C1	-			C91-0023- C91-0647-	The second second	CERAMIC 0.01UF AC250V CERAMIC 0.01UF P	UMUEX*	
53	3	3B	*	D22-0050-	-04	SHAFT COUPLING		
54 54 55 55	1 5 5	1D 1D 1D 1D 1D		E03-0061- E03-0061- E30-0181- E30-0459- E30-0587-	-05 -05 -05	AC BUTLET AC BUTLET AC POWER CORD AC POWER CORD AC POWER CORD	KPUM <u>UE</u> X K E T	
55 55 55	5	1 D 1 D 1 D		E30-0649- E30-0780- E30-0812-	-05	AC POWER CORD AC POWER CORD AC POWER CORD	X P UM <u>UE</u>	
56	<b>5</b>	3A	*	G01-1438-	-04	COMPRESSION SPRING		
- - - -			* * *	H01-4969- H01-4970- H01-4970- H10-1706- H25-0078-	-04 -04 -02	ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE PROTECTION BAG	T KPUM <u>UE</u> XE	
57 58 59 59	3 ? ?	3C 3D 1D 1D 1D	n per 25,00	J02-0109- J02-0129- J42-0083- J42-0083- J42-0085-	-05 - <b>05</b> - <b>05</b>	FOOT FOOT POWER CORD BUSHING POWER CORD BUSHING POWER CORD BUSHING	KPUM UETE	
60 61 62 63 64	l 2 3	3A 2A 2A 3B 3A	* *	K27-1060- K27-1061- K27-1112- K27-1230- K29-1351-	-04 -04 -04	KNØB (BUTTØN) PHØNØ REC KNØB (BUTTØN) PUSH KNØB (BUTTØN) SPEAKERS KNØB BALANCE KNØB ASSY PHØNØ		
65 66 67	5	3A 3A 2A	<b>*</b> :	K29-1352- K29-1354- K29-1446-	-04	KNØB TØNE KNØB VØLUME KNØB ASSY PØWER		

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa



\*New Parts
Parts without Parts No. are not supplied
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. N	No.	Address		P	arts	No.		Description	Desti- nation	Re-
参照者	# 号	位置	Parts 新	部	品	番	号	部品名/規格		備考
68 69 70 71		3A 3A 3A 3A	*	K29-1 K29-1 K29-1 K29-1	451- 452-	-04 -04		KNOB ASSY TUNER KNOB ASSY TAPE A KNOB ASSY TAPE B KNOB ASSY AUX		
L1 L1 L1 ; ; L1 ; ; L1 ; ; ; ; ; ; ; ; ; ; ; ;		18 18 18 18	*	L01-3 L01-3 L01-3 L01-3	392 396 <b>396</b>	-05 -05, - <b>05</b>	No.	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	K E UM <u>UE</u> X T	17
72		1 D		N08-0	128	-35		BINDING POST		
51 52 52 52	4.3.34	28 1D 1D 1D		540-1 531-2 531-2 531-2	nn t	-05	2.2 季 6%	PUSH SWITCH (POWER) SLIDE SWITCH (IMP SW) SLIDE SWITCH (IMP SW) SLIDE SWITCH (IMP SW)	UMUEX TE KP. *	
								KA-72B		<b></b>
51 52 52 52		1A 3B 3B 3B	* * *	A01-0 A20-3 A20-3 A20-3	801 801	-03 -03		METALLIC CABINET PANEL ASSY PANEL ASSY PANEL ASSY	KPUM UEXE T	
- - - -				846-0 846-0 846-0 846-0 846-0	1093 1094 1095	-03 -03 -03		WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	K P U <u>UE</u> U <u>UE</u> X	
- - -				846-0 846-0 850-5 850-5 850-5	0098 018 5018	20- 200- 200-		WARRANTY CARD WARRANTY CARD INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (F)	T E KPUM <u>UE</u> PMXE	
- - -				B50-5 B50-5 B50-5 B59-0	5021 5027	-00 -00		INSTRUCTION MANUAL (E) INSTRUCTION MANUAL (G,D,I,SW) INSTRUCTION MANUAL (SP,E) SERVICE DIRECTORY	T E M U <u>UE</u>	and the state of t
C1			1	C915-C	1023 1647	-05 -05		CERAMIC 0.01UF AC250V CERAMIC 0.01UF P	KP.	
53		зв		D22-0	050	-04		SHAFT COUPLING		
54 54 55 55 55		1D 1D 1D 1D 1D		E03-0 E03-0 E30-0 E30+0 E30-0	0061 0181 0459	-05 -05 -05	6.13. <b>M</b> .24	AC BUTLET AC BUTLET AC POWER CORD AC POWER CORD AC POWER CORD AC POWER CORD	KPUM UEX K E	
55 55. 4 55. 4	i a	1D 1D 10	2	E30=0 E30=0 E30=1	1780	-05		AC POWER CORD ACLPOWER CORD	X P UMUE	
56		ЗА		G01-1	1438	-04		COMPRESSION SPRING		
- - -			* * *	H01-5 H01-5 H01-5 H10-1 H25-6	5029 5030 1706	-04 -04 -02	· •	ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE PROTECTION BAG	KPUM UEXE T	
57		30		J02-0	0109	-05		FOOT		

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa

<u>**UE**</u>: AAFES(Europe)

T: England U: PX(Far East, Hawaii) X: Australia M: Other Areas

× New Parts

Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

т	مار	ohne	Parte	Nο	worder	nicht	 hofo	rt

Ref.	No.		New Parts	Parts	No.	D	escription		Desti- nation	Re- mark
照参	番号	位 置	新	部品	番号	部品	名/規	格		備考
58 59 59 59		3D 1D 1D - k 1D - k		J02-0129 342-0083 J42-0083 J42-0085		FOOT POWER FORD B	USHING USHING	and confidence of the second second second	KPUM K	
60 61 62 63 64		3A 2A 2A 3B 3A		J21-3326 K27-1060 K27-1153 K27-0965 K29-1518 K29-1511	-04 -04 -04 -04	JACK MOUNTIN KNOB (BUTTON KNOB (BUTTON KNOB KNOB KNOB ASSY	) PHØNØ R ) PUSH			
65 66 67 68 69		3A 3A 2A 3A 3A		K29-1516 K29-1517 K29-1446 K29-1512 K29-1514	-04 -04 -04	KNOB KNOB KNOB ASSY KNOB ASSY KNOB ASSY	TONE VOLUME POWER TUNER TAPE A			
70 71		3A 3A		K29-1515 K29-1513		KNØB ASSY KNØB ASSY	TAPE B AUX			
LIP LIP LI LI LI		18 18 18 18 18		LOL-3393 LOL-3392 LOL-3396 LOL-3396 LOL-3397	-05) -05 -05	POWER TRANSF POWER TRANSF POWER TRANSF POWER TRANSF POWER TRANSF	DRMER DRMER DRMER		K E UMUEX T P	
72		1 D		N08-0128	-35	BINDING POST				
S1 S2 S2 S2 S2		28 10 10 10 10	3	\$40 \$1073 \$31 \$2001 \$31 \$2001 \$31 \$2068	-05***	PUSHTSWITCH SCIDE SWITCH SLIDE SWITCH SLIDE SWITCH	CIMP SW)		UMUEX. TE KP	
				F	POWER AN	/IP (X07-2090-12	-		1	·
СЗ ,				CEO4FW1H CC45FSL1I CEO4FW1A CC45FSL1I CC45FSL1	H221J 101M H330J	ELECTR® CERAMIC ELECTR® CERAMIC CERAMIC	1UF 220PF 100UF 33PF 18PF	50WV J 10WV J J		
C19 ; C21 C31 ; C37 ; C39 -	32 38			CC45FSL1F CE04FW1E CE04FW1H CE04FW1J CF92FV1H	220M 330M 101M	CERAMIC ELECTRO ELECTRO ELECTRO MF	5. OPF 22UF 33UF 100UF 0. 10UF	C 25MA 83MA 7	TE	
C41 C41 C51 C54 C55	42			CF92FV1H CF92FV1H CE04FW1E CE04FW1H CE04FW1H	473J 220M 100M	MF MF ELECTRØ ELECTRØ	0.047UF 0.047UF 22UF 10UF 1UF	J J 25WV 50WV 50WV	KPUM UEX	
			W.	CKASEOUI			ر در الله 0.01UF	7.56WV		J. T
C58 C60 C61	, J7			CK45E2H1 CED4FW1A CEO4FW1A	221M	CERAMIC ELECTRO ELECTRO	220UF 47UF	10WV 10WV		
101		20		NO9-0333	-05	TAPPING SCRE	W			
R15 R21 R31 R33 R35	, 22 , 32		*	RD14AB2E RD14GB2E RS14GB3A RS14GB3A RD14GB2E	271J 332J 472J	FL-PROOF RD FL-PROOF RD FL-PROOF RS FL-PROOF RS FL-PROOF RD	180 270 3. 3K 4. 7K 33	J 2E J 2E J 3A J 3A J 2E		

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa

T: England U: PX(Far East, Hawaii)

UE: AAFES(Europe)

X: Australia M: Other Areas



\* New Parts
Parts without **Parts No.** are not supplied
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis
Teile ohne **Parts No.** werden nicht geliefert.

	Ref	. No.	Address			arts	No.	Description Desti- Re-
	参用	照番号	位 置	Parts 新	部	品	番号	mation mark
	R36 R37 R38 R39 R41	,40		* * * *	RD14A RD14G RD14A RD14A RD14A	B2E: B2E:	330J 330J 151J	FL-PR00F RD 33 J 2E FL-PR00F RD 33 J 2E FL-PR00F RD 33 J 2E FL-PR00F RD 150 J 2E FL-PR00F RD 330 J 2E
	R42 R43 R49 R59 R61	•50 •60		*	RD14G RD14A R90-0 RS14G RD14A	B2E: 187: B3D:	331J -05 100J	FL-PRONF RD 330 J 2E FL-PRONF RD 330 J 2E MULTI-COMP 0.22X2 K 3H FL-PRONF RS 10 J 3D FL-PRONF RD 82 J 2E
	R72 R72 R72 R75 R76	,73			RS14G RS14G RS14G RS14G RS14G	B3D B3D: B3A:	121J 151J 222J	FL-PR00F RS 120 J 3D KPUM FL-PR00F RS 120 J 3D UEX FL-PR00F RS 150 J 3D FL-PR00F RS 2.2K J 3A FL-PR00F RS 2.7K J 3A
⚠	R78 R78 R84 R87 VR1	,2		*	RS14G RD14G RD14A RS14G R12-0	B2H B2E6 B3A	752J 320J 122J	FL-PROOF RS 300 J J 30 L FL-PROOF RD 7.5K J 2H FL-PROOF RD 82 J 2E FL-PROOF RS 1.2K J 3A TRIMMING POT. 200(B) BIAS
	RL1 D5	,6		*	S51-2 RD18E			MAGNETIC RELAY (PROTECTION) ZENER DIODE
Δ				200		6 <b>EX</b>		DINDE DINDE
		-4 -8			RD24E RD12E RD12E UPC12: 2SA99 2SC18	(B2) (B2) 37H 2(F	) •E)	VARISTOR  ZENER DIODE  ZENER DIODE  IC (PROTECTION)  TRANSISTOR (1ST AMP)  TRANSISTOR (2ND AMP)
<b>∆</b> . <b>∆</b> .	017 019 <b>021</b> <b>023</b> 025		and the second s		2SC25 2SA11 <b>2SC32</b> <b>2SA12</b> 2SC18	11 (F 63 (F 94 (f	R,S) N,Y); N,Y);	TRANSISTOR (DRIVER) TRANSISTOR (DRIVER) TRANSISTOR (POWER) TRANSISTOR (POWER) TRANSISTOR (REGULATOR)
⚠	Q26 Q28 <b>Q30</b> *				25A76 25A99 2 <b>5C20</b>	9(E:	F)	TRANSISTOR (REGULATOR) TRANSISTOR (POWER SUPPLY CONT.) TRANSISTOR (REGULATOR)
					hiii	**********		P (X11-1930-11)
	D1 D5 D6 PL1	-4			B30-0- B30-0 B30-0	499- 500- 777-	-05 -05 -05	LED (SELECTOR) LED (TAPE B) LED (PHONO REC) LAMP (POWER) 12V 0.11A
	C1 C3 C3 C3 C5	,2 ,4 ,4 ,4			CE04FI CC45FI CC45FI CC45FI CK45FI	SL.11 SL.11 SL.11	4101J 4101J 4221J	ELECTR® 10UF 50WV CERAMIC 100PF J KPUM CERAMIC 100PF J UEX CERAMIC 220PF J TE CERAMIC 2200PF K TE
	C5 C5 C7 C9 C11	,6 ,6 ,8 ,10 ,12			CK45F CK45F CED4F CF92F CF92F	B1H5 W1A4 V1H1	561K 470M 123J	CERAMIC 560PF K KPUM CERAMIC 560PF K UEX ELECTRO 47UF 10WV MF 0.012UF J MF 3300PF J

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa

T: England U: PX(Far East, Hawaii)

UE: AAFES(Europe)

X: Australia M: Other Areas



\* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

	Ref. No.	Address		Parts No.	Description	Desti-	Re-
	参照番号	位 置	Parts 新	部品番号	部 品 名 / 規 格	nation 仕 向	備考
	C13 ,14 C15 ,16 C17 ,18 C19 ,20 C21 ,22			CE04FW1H2R2M CE04FW1H0R1M CF92FV1H333J CE04FW1H3R3M CC45FSL1H221J	ELECTR® 2.2UF 50WV ELECTR® 0.1UF 50WV MF 0.033UF J ELECTR® 3.3UF 50WV CERAMIC 220PF J		
	C23 -26 C27 -30 C31 .32 C33 .34 C35 -40			CK45FB1H561K CE04FW1H100M CF92FV1H104J CK45FB1H102K CE04FW1H100M	CERAMIC 560PF K ELECTR® 10UF 50WV MF 0.10UF J CERAMIC 0.001UF K ELECTR® 10UF 50WV		
	C41 ,42 C43 -47 C49 -56 C68 ,69 C70 ,71			CE04FW1H2R2M CK45FF1H103Z CK45FB1H561K CE04FW1H010M CK45FF1H103Z	ELECTRN 2.2UF 50WV CERAMIC 0.01UF Z CERAMIC 560PF K ELECTRN 1UF 50WV CERAMIC 0.01UF Z	TE	
ı	201 203 206 - -	2B 1C 1C		E11-0135-05 E13-0217-05 E20-0820-05 E13-0434-05 E13-0622-05	PHONE JACK (HEADPHONE) PHONO JACK (2P) LOCK TERMINAL BOARD (SPEAKERS) PHONO JACK (4P) PHONO JACK (6P)	-	
	L1 +2			L39-0085-05	PHASE-COMPENSATION COIL		
1	R65 ,66 R67 ,68 R69 VR1 VR2			RD14GB2E2R2J RS14GB3D391J RS14GB3A560J R06-5087-05 R01-5041-05	FL-PR00F RD 2.2 J 2E FL-PR00F RS 390 J 3D FL-PR00F RS 56 J 3A P0TENTIOMATER 100K V0LUME P0TENTIOMATER 200K(W) BALANCE		
	VR4 -5 VR6 -7		* *	R06-5116-05 R06-5117-05	POTENTIOMATER 100K TONE POTENTIOMATER 100K TURNOVER		
	\$1 \$2 \$3		*	\$42-6016-05 \$40-2323-05 \$42-5037-05	MULTIPLE PUSH SWITCH(SELECTOR) PUSH SWITCH (TONE) PUSH SW(MODE,SP,LOUD,SUBSONIC)		
	IC1 IC2 IC3 Q1 -4			LA6458SS AN6555 AN6556 2SC1845(F,E)	IC (EQ AMP) IC (TONE AMP) IC (TONE AMP) TRANSISTOR (CONTROLLER)		
				POWER SUP	PLY (X13-4340-11)		
	C1 C3			CE04FW1H4R7M CK45F1H103Z	CERAMIC 0.01UF Z		
2	F1 F1 F1 F2 F2			F05-3121-05 F05-6021-05 F05-6027-05 F05-3022-05 F05-3121-05	FUSE (SEMKO) FUSE FUSE (UL) FUSE FUSE (SEMKO)	E UM <u>UE</u> X KP UM <u>UE</u> X T	
	-			J13-0041-05 J13-0055-05	FUSE CLIP FUSE CLIP	UM <u>UE</u> X KPTE	
۵	51 77	r gjary		531-2063505	SEIDERSWINGUAGENER VOLTAGEN	<b>UNUEX</b>	5 36A
	D1			MO9B	DIØDE.		
1							

E: Scandinavia & Europe H:Audio Club K: USA

P: Canada

S: South Africa